

**REMARKS**

The above amendment and these remarks are responsive to the Office action of 17 Jun 2005 by Examiner David Yiuk Jung.

Claims 1-11, 15-17, 24-26, and 30-40 are in the case, none as yet allowed.

The Office Action refers to claims 1-11, 15-27, and 30. However, claim 27 was previously canceled, and claims 31-40 added in the Amendment filed 16 Sep 2005.

**35 U.S.C. 103**

Claims 1-11, 15-27, and 30. have been rejected under 35 U.S.C. 103(a) over <http://www.sans.org/dosstep/index.php> ("Sans").

Applicants cancel without prejudice claims 18-23.

As noted above, claim 27 was previously canceled, and claims 31-40 added.

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With respect to claim 1, the Examiner refers to Sans step 2.2 as teaching, inter alia, "issuing a bit encoded login challenge" [Office action, page 2]. Applicants have amended independent claims 1, 11, 15, 26, 30 and 31 to more precisely describe what is meant by a "bit encoded login challenge", as that is described in connection with Figure 3, as follows:

Figure 3 illustrates an example of the challenge/response method. Figure 3 depicts a bit-encoded login challenge question, requiring the user to read a question and answer it. In this example, the login question is "TO ENTER WEBSITE XYZCO, PLEASE CLICK ON THE COW'S TAIL". The significance of bit encoding is that the challenge is not composed of machine readable USASCII or EBCDIC text. Rather, it is a picture of the text, which an ordinary machine cannot understand. A human will have no problem responding correctly, whereas a machine will be unable to do so. By bit-encoding the login challenge, zombies will be foiled from gaining access to the web site and launching attacks from within valid connections.  
[Specification, page 34, line 20 ff.]

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Further with respect to claim 1, the Examiner states:

"These passages of Sans do not teach 'limited' service in the sense of the claim. Instead, Sans appears to imply that the service should be entirely cut off if the network is being used as a broadcast amplification site. Nevertheless, it was well known in the art to have a 'limited' service for the motivation of having the option to further track the requestor who may not request again if the service is entirely cut off."

[Office Action, page 3.]

Claim 1 requires that the imposition of limited service be conditioned upon an invalid response to a bit encoded challenge to a log-in request, and that concept is not taught or suggested by Sans.

Claims 2-10 depend from claim 1, and are similarly distinguished.

However, specifically with respect to claims 3 and 4, applicants traverse the Examiner's suggestion that "such particular features are well known in the art." The claimed "determining from said speed, latency and average queuing

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network delay a time-out value" relate to concepts which are defined in applicant's specification (See reference to Silverman 1 and Silverman 2, at page 27, line 21) and which applicant asserts are not "well known". Accordingly, the Examiner is respectfully requested to withdraw the rejection of Claims 3 and 4 under 35 U.S.C. 103(a), and allow Claims 3 and 4. However, if the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide an affidavit attesting to this statement pursuant to 37 CFR 1.104 (d) (2) .

With respect to claims 15-27, 30, the Examiner states:

"...such particular features are well known in the art for the purpose of handling information across computers and of security." [Office Action, page 4.]

Applicants traverse. As applicant has previously argued, the art cited, and further most surely the art which is purported by the Examiner to be well known in the art but which the Examiner does not cite, do not teach the claimed bit-encoded challenge-response procedure as that is not recited in the amended independent claims 15, 26, and 30 nor the use in a router-based filtering system of signatures

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derived from discrete speed, streaming speed, and latency of connecting devices failing the bit-encoded challenge-response procedure. Accordingly, the Examiner is respectfully requested to withdraw the rejection of Claims 15-17 under 35 U.S.C. 103(a), and allow Claims 15-17. However, if the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide an affidavit attesting to this statement pursuant to 37 CFR 1.104(d) (2).

With respect to claims 24 and 25, applicants traverse. Claim 24 recites creating a template of attack patterns for a plurality of types of network traffic and responsive to the attack patterns, determining if a spike in network traffic is a DDOS attack. Claim 25, which depends from claim 24, adds determining unique speed and latency network attachment characteristics of devices attempting to connect to said network resource. Applicant argues that it is improper to rely on a bare assertion of "well known" (that is, upon personal knowledge) under these circumstances. Accordingly, the Examiner is respectfully requested to withdraw the rejection of Claims 24-25 under 35 U.S.C. 103(a), and allow Claims 24-25. However, if the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide an affidavit attesting to this

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statement pursuant to 37 CFR 1.104(d)(2).

With respect to claim 26 (claim 27 has been canceled) these claims are similar to claim 1. Applicants have amended claims 1 to focus on the bit-mapped challenge in response to a login request. This is a concept which, applicant asserts, is not a feature well known in the art. Applicant argues that it is improper to rely on a bare assertion of "well known" (that is, upon personal knowledge) under these circumstances. Accordingly, the Examiner is respectfully requested to withdraw the rejection of claim 26 under 35 U.S.C. 103(a). However, if the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide an affidavit attesting to this statement pursuant to 37 CFR 1.104(d)(2).

#### SUMMARY AND CONCLUSION

Applicants urge that the above amendment be entered and the case passed to issue with claims 1-11, 15-17, 24-26, and 30-40.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should

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differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented, thereby placing the Application in condition for allowance without further proceedings being necessary.

Sincerely,

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